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netism was produced. The same result was afterwards obtained in comparative trials; the steel was found to be no way affected by white light.

As the season advanced and the sun's force diminished, these effects became more feeble, and further experiments were in consequence deferred till the return of summer; but from the experiments here detailed, the authoress thinks herself entitled to regard a magnetic influence in the more refrangible solar rays as demonstrated.

*On the mutual Action of Sulphuric Acid and Naphthaline, and on a new Acid produced.* By M. Faraday, F.R.S. Corresponding Member of the Royal Academy of Sciences, &c. &c. Communicated January 12, 1826. Read February 16, 1826. [*Phil. Trans.* 1826, Part II. p. 140.]

In this communication Mr. Faraday shows that when sulphuric acid and naphthaline act upon each other, a peculiar compound possessed of distinct acid characters is the result. This acid is most readily obtained by heating two parts of naphthaline with one of sulphuric acid. The mixture concretes on cooling, and separates into two parts, the uppermost of which is little else than naphthaline, but the lower, heavier part contains the peculiar acid, which, being soluble in water, is easily separated by that fluid, not, however, pure, but still containing mixed sulphuric acid. The author, however, obtained the pure acid by decomposing its compound with baryta, which is soluble, by sulphuric acid. It then had a bitter sour taste, and formed a distinct class of salts with the different bases, all of which are soluble in water and in alcohol, and combustible.

By careful evaporation of the aqueous solution of this acid, a white crystalline deliquescent solution was obtained, evolving water when heated, and at high temperatures affording sulphurous acid, charcoal, and naphthaline. To determine the ultimate component parts of this acid, its compound with baryta was subjected to rigid analysis; the results of which were

78 baryta .....	=	1 proportional.
80 sulphuric acid .....	=	2 proportionals.
120 carbon .....	=	20 ———
8 hydrogen .....	=	8 ———

This acid, therefore, only possesses half the saturating power of sulphuric acid, and it would accordingly appear that the hydro-carbon acts the part of a neutralizer of one of the proportionals of sulphuric acid. This property of hydro-carbon, the author observes, was pointed out to him by Mr. Hennell, as manifested in the formation of sulpho-vinous acid, before he had established it in regard to the above peculiar combination.

Mr. Faraday proposes to call the acid, of which he has described the sources, nature, and properties, Sulpho-naphthalic Acid.